ESCoE Conference on Economic Measurement 2022

25-27 May 2022

University of Strathclyde, Technology and Innovation Centre, 99 George Street, Glasgow G1 1RD

DRAFT Conference Programme
Last updated: 07/04/2022

This Conference is an on-the-record event with some sessions being recorded. It will be held in person
Speakers highlighted in bold

Scientific Committee:

Diane Coyle (University of Cambridge)
Rutger Hoekstra (MetricsForTheFuture.com and Leiden University)
Gary Koop (University of Strathclyde) Co-chair
Bart Los (University of Groningen) Co-chair
Sanjiv Mahajan (Office for National Statistics) Co-chair
Juan Mateos-Garcia (Nesta)
Stuart McIntyre (University of Strathclyde)
Mairi Spowage (University of Strathclyde)
Philip Wales (Office for National Statistics)

Wednesday 25 May 2022

09:45-10.40: Registration and Coffee
Location: Level 2 Foyer

10.40-12.00: Welcome and Plenary Session I
Location: Auditoria B & C

Welcome

Sir Robert Chote (UK Statistics Authority)

Plenary Session I

Chair: Sir Robert Chote (UK Statistics Authority)

Sir Charles Bean (London School of Economics)
The Independent Review of Statistics Five Years On – and the Next Five Years

12.00-13.00: Lunch
Location: Level 2 Foyer

13.00-14.30: Special Session A and Contributed Sessions A/B/C

Special Session A: British Productivity in the Age of COVID
Location: Auditoria B & C

Chair: Stephen Millard (National Institute of Economic and Social Research)

- **Adrian Pabst** (National Institute of Economic and Social Research)
  COVID-19 and Productivity: Impact and Implications

Discussant: Bart van Ark (The Productivity Institute and University of Manchester)

Policy Panel: Sam Beckett (Office for National Statistics), Sophie Piton (Bank of England) and Anthony Venables (The Productivity Institute and University of Manchester)

Contributed Session A: Beyond GDP
Location: Level 3 Conference Room 4 & 5

Chair: Cliodhna Taylor (Office for National Statistics)

- **Julian Winkler** (University of Oxford and Institute of New Economic Thinking at the Oxford Martin School)
  Accounting for Variety

- **Roger Fouquet** and Gregor Singer (London School of Economics)
  Net Domestic Consumer Surplus (NDCS) and its Environmental Impact, 1700-2017

- **Richard Heys** and Cliodhna Taylor (Office for National Statistics)
  GDP and Welfare: Empirical Estimates of a Spectrum of Opportunity

Contributed Session B: Trade and Welfare Measurement
Location: Level 3 Conference Room 2

Chair: Raghav Malhotra (University of Warwick)

- **Mustapha Douch** (University of Edinburgh), Jun Du (Aston University) and Enrico Vanino (University of Sheffield)
  Defying Gravity? Policy Uncertainty, Trade Destruction and Diversion

- **Luke Mosley,** Kaveh Nobari and Alex Gibberd (Lancaster University)

High Dimensional Temporal Disaggregation and Nowcasting: Examination of Trade-In-Services Throughout the Brexit Transition Period

Sebastiaan Maes (KU Leuven) and **Raghav Malhotra** (University of Warwick)
Individual Heterogeneity and the Distribution of Welfare Individual Heterogeneity and the Distribution of Welfare

Contributed Session C: New Applications of Data Sources and Methods Used in National Accounts
Location: Level 3 Conference Room 3

Chair: **Russell Black** (Office for National Statistics)

- **Khloe Tabor** and Gueorguie Vassilev (Office for National Statistics)
  Using Online Job Adverts to Better Understand the Labour Market

- **Baoline Chen** and Kyle Hood (Bureau of Economic Analysis)
  Nowcasting of Advance Estimates of Personal Consumption of Services in the U.S. National Accounts: Individual vs Forecasting Combination Approach

- **Russell Black** (Office for National Statistics and King's College London), Josefa Lavandero Masson and Jakob Schneebacher (Office for National Statistics)
  Estimates Of Markups, Market Power and Dynamism from UK Firm-Level Survey Data

14.30-15.00: Coffee
Location: Level 2 Foyer

15.00-16.00: Panel Session I
Location: Auditoria B & C

Chair: **Emma Hickman** (Office for National Statistics)

Addressing the challenges of subnational statistics
Panellists: Sharada Davidson (University of Strathclyde), Tom Smith, Urvashi Parashar (Department for Levelling Up, Housing and Communities) and Tom Forth (Open Innovations)

16.15-17.45 Special Session B and Contributed Sessions D/E/F

Special Session B: Alternative Data Sources in CPIH and CPI
Location: Auditoria B & C

Chair: Jill Leyland (Royal Statistical Society)

- **David Moran** and **Joe Barker** (Office for National Statistics)

Alternative Data Sources for Rail Fares and Second-hand Cars in CPIH and CPI

- **Huw Pierce** (Office for National Statistics)
  Household Costs Indices (HCIs)

- **Paul Smith** and Francesco Pantalone (University of Southampton)
  Variance estimates in UK Consumer Price Indices

Contributed Session D: COVID-19 I

Location: Level 3 Conference Room 3

Chair: David Van Dijcke (University of Michigan)

- **Robynne Davies** and Gueorguie Vassilev; (Office for National Statistics)
  The furlough scheme in the UK: who was affected and how?

- Peter Levell (Institute for Fiscal Studies), **Lars Nesheim** (University College London) and Alessia Testa (University of Portsmouth)
  Sectoral Impacts of COVID-19: A General Equilibrium Analysis of The Pandemic

- Marcus Buckmann and Tomas Key (Bank of England), Arthur Turrell (Office for National Statistics) and **David Van Dijcke** (University of Michigan)
  Vacancy Posting, Firm Balance Sheets, and Pandemic Policy Interventions

Contributed Session E: Gaps and Trends in Macroeconomic Variables
Location: Level 3 Conference Room 2

Chair: N. Kundan Kishor (University of Wisconsin-Milwaukee)

- **Pei Kuang** (University of Birmingham) and Kaushik Mitra and Li Tang (University of Essex)
  Output Gap Estimation and Monetary Policy with Imperfect Knowledge

- **Saeed Zaman** (Federal Reserve Bank of Cleveland)
  A Unified Framework to Estimate Macroeconomic Stars

- **N. Kundan Kishor** and Nam Nguyen (University of Wisconsin-Milwaukee)
  Measuring Credit Gap

Contributed Session F: Digitalisation
Location: Level 3 Conference Room 4 & 5

Chair: Karlis Kanders (Nesta)

- **Oleksii Romanko** (King's College London)
  Digital Opportunity: How Cloud Computing Changes the Shape of The UK Economy

- Yanbing Bai, Yafeng Wu, Ying Hao, and Xinyi Wu (Renmin University of China), Bolin Zhang (University of China) and **Xuxin Mao** (National Institute of Economic and Social Research)
  Using Satellite Imagery and Deep Learning to Measure the Economic Development Level

- **Karlis Kanders** and Laurie Smith (Nesta)
  Which Green Technologies are at a Tipping Point? A Data-Driven Horizon Scanning Approach

18.00: Drinks Reception and Dinner *Drinks reception sponsored by the Lord Provost of Glasgow*
         Location: The Old Fruit Market, 100 Candleriggs, Glasgow G1 1NQ

Thursday 26 May 2022

08.30-09.00: Registration and Coffee
         Location: Level 2 Foyer

09.00-10.30: Special Session C, Contributed Sessions G/ H/I and Workshop A

Special Session C: Using New Methods and Data Sources to Improve Economic Statistics: An ONS and Turing Institute Collaboration
         Location: Auditorium B

Chair: Arthur Turrell (Office for National Statistics)

- **Victor Meirinhos** (Office for National Statistics) and Francois Lafond (The University of Oxford and The Alan Turing Institute)
  Economic Networks and Transaction Data

- **Giulia Mantoan,** Sam Cohen (The Alan Turing Institute), Katherine Kent, Silvia Lui, Jeremy Rowe and Emma Small (Office for National Statistics)
  Economic Nowcasting

- **Owen Daniel** (Office for National Statistics)
  Synthetic Data and Privacy Preservation

Contributed Session G: New and Old Products and Activities: Statistical Challenges
         Location: Level 3 Conference Room 2

Chair: **Miriam Steurer** (University of Graz)

- **Arash Hajikhani** and Arho Suominen (VTT Technical Research Centre of Finland)

Beyond Legacy Economic Activity Classification: Novel Application of Website Scraped Content and Microsoft Academic Graph to Identify Firm's Activity

- **Jack Philips** (Department for Digital, Culture, Media and Sport)
  Valuing Culture and Heritage Capital

- Robert J. Hill, Norbert Pfeifer, **Miriam Steurer** (University of Graz) and Radoslaw Trojanek (Poznan University of Economics and Business, Poland)
  Warning: Some Transaction Prices can be Detrimental to your House Price Index

Contributed Session H: Gender Bias, Well-being and Inequality
     Location: Level 3 Conference Room 3

Chair: Ines Lee (University of Cambridge)

- **Tho Pham** (University of Reading)
  Gender Bias in Online Job Ads: Uncovering Hidden Preferences

- **Eléonore Richard** (Paris School of Economics)
  Who Feels Poor? Transitions into Poverty and Subjective Well-Being

- **Ines Lee** (University of Cambridge) and Eileen Tipoe (Queen Mary University of London)
  Changes In the Quantity and Quality of Time Use During The COVID-19 Lockdowns in the UK: Who is the Most Affected?

Contributed Session I: Regional Inequality
     Location: Level 3 Conference Room 4 & 5

Chair: Alexander Lembcke (OECD)

- **Tommaso Ciarli** (UNU-MERIT), Mattia Di Ubaldo and Maria Savona (University of Sussex)
  Where do Wages Benefit from Productivity Growth? Evidence from UK Firms and Labour Markets

  Alexandre Banquet, Paul Delbouve (OECD), Michiel N. Daams (University of Groningen) and Paolo Veneri (OECD)
  Monitoring Land-Use in Cities Using Satellite Imagery and Deep Learning

- Marcos Diaz Ramirez, Paolo Veneri and **Alexander Lembcke** (OECD)
  Where Did It Hit Harder? The Geography of Excess Mortality During the COVID-19 Pandemic

Workshop A: Measuring the Economy
     Location: Auditorium C

'Measuring the Economy' is an online textbook produced by the Office for National Statistics (ONS). It aims to explain key economic concepts and show how these apply in real life and

can be measured, including the evolving challenges and opportunities. The session will cover:

- why the topic is important, with real-life examples of how the related statistics matter
- the statistics compiled and why they are measured
- how this is relevant to policymakers, economists and the wider public
- the latest controversies and issues
- current developments in compiling these statistics and likely future ones

10.30-11.00: Coffee
Location: Level 2 Foyer and Level 3

11.00-12.15: Plenary Session II
Location: Auditoria B & C

Chair: Gary Koop (University of Strathclyde)

Chiara Criscuolo (OECD and London School of Economics)
The Role of Telework for Productivity During and Post-Covid-19: Results from an OECD Survey among Managers and Worker

12.15-13.30: Lunch
Location: Level 2 Foyer

13.30-15.30: Contributed Sessions J/K/L/M and Workshop B

Contributed Session J: Productivity, Labour and Wages
Location: Auditorium B

Chair: **Takafumi Kawakubo** (London School of Economics and National Institute of Economic and Social Research)

- **Yanwan Ji** (The University of Warwick)
  Artificial Intelligence, Human Capital and Productivity Growth

- **Elodie Andrieu** (King's College London) and Malgorzata Kuczera (OECD and University of Cambridge)
  The Impact of the Minimum Wage on Education and Tech Skill Requirements in Jobs: Evidence from Job Vacancy Data

- Jangho Yang (University of Waterloo), Torsten Heinrich (University of Bremen), Julian Winkler, **Francois Lafond**, Pantelis Koutroumpis (University of Oxford) and J. Doyne Farmer (Institute for New Economic Thinking at the Oxford Martin School)
  Measuring Productivity Dispersion: A Parametric Approach Using the Lévy Alpha-Stable Distribution

- Nicholas Bloom (Stanford University), **Takafumi Kawakubo** (London School of Economics and National Institute of Economic and Social Research), Charlotte Meng (National Institute

of Economic and Social Research), Paul Mizen (University of Nottingham), Rebecca Riley (King's College London), Tatsuro Senga (Queen Mary University of London) and John Van Reenen (London School of Economics)
Do Well Managed Firms Make Better Forecasts?

Contributed Session K: Through The COVID-19 Pandemic Statistical Challenge
Location: Auditorium C

Chair: Gueorguie Vassilev (Office for National Statistics)

- Ellis Best, Niamh McAuley, **Craig McLaren** and Andrew Walton (Office for National Statistics)
  Recent Production Challenges in The Compilation of The UK National Accounts

- Omar Bamieh (University of Vienna) and **Lennart Ziegler** (University of Vienna)
  Are Remote Work Options the New Standard? Evidence from Vacancy Postings During the COVID-19 Crisis

- **Sophie Barrand,** Ellis Daniel, Sumit Dey -Chowdhury, Andrew Walton (Office for National statistics)
  Meeting the Challenge of Economic Measurement During the COVID-19 Pandemic Through Extended Use of Administrative VAT Data And Implications for UK National Accounts

- Robynne Davies and **Gueorguie Vassilev** (Office for National Statistics)
  Understanding The Impacts on UK Human Capital Stocks During the Pandemic Period

Contributed Session L: Productivity, Labour and Wages
Location: Level 3 Conference Room 2

Chair: Oscar Lemmers (Statistics Netherlands)

- Kevin Lee, **Michael Mahony** and Paul Mizen (University of Nottingham)
  Investment and Capacity Utilisation in a Putty-Clay Framework

- Pierre-Alain Pionnier, **Maria Belen Zinni** and Kéa Baret (OECD)
  A Sensitivity Analysis of Capital and MFP Measurement to Asset Depreciation Patterns and Initial Capital Stock Estimates

- Petros Varthalitis and **Ilias Kostarakos** (Athens University of Economics and Business)
  Is Ireland the Most Intangible Intensive Economy in Europe? A Growth Accounting Perspective

- **Oscar Lemmers** (Statistics Netherlands)
  Measuring the Economic Contribution of Firms and Activities in Terms of National Income

Contributed Session M: Nowcasting and Forecasting
	Location: Level 3 Conference Room 3

Chair: Martin Weale (King's College London)

-	**Tony Chernis** (Bank of Canada and University of Strathclyde)
	Combining Large Numbers of Density Predictions with Bayesian Predictive Synthesis

-	Eiji Goto (University of Missouri-St. Louis), Jan P.A.M. Jacobs (University of Groningen) Tara Sinclair (George Washington University), **Simon van Norden** (HEC Montréal
	Employment Reconciliation and Nowcasting

-	Joshua C. C. Chan **(**Purdue University**), Aubrey Poon** (Örebro University), Dan Zhu (Monash University
	Efficient Estimation of State-Space Mixed-Frequency VARs: A Precision-Based Approach

-	**Martin Weale** (King's College London) and James Mitchell (Federal Reserve Bank of Cleaveland)
	Censored Density Forecasts: Production and Evaluation

Workshop B: The Language of (Economic) Data is Visualisation

	Location: Level 3 Conference Room 4 & 5

The Economics Observatory use data visualisation as the main information support method to amplify and distil the analysis in our articles. This 2-hour workshop is designed to highlight the advantages and some caveats of using data visualisation as the main channel for communicating economic information to a wide and diverse audience.

Schedule: tbc

15.30-16.00: Coffee
	Location: Level 2 Foyer

16.00-17.00: Panel Session II
	Location: Auditorium

Chair: Sam Beckett (Office for National Statistics)

	Title: Communicating Data
	Panellists: tbc

17.00-19.30: Poster Session and Drinks Reception
	Location: Level 2 Foyer and Level 3 Centre

Posters to be presented:

Andre Sanchez Pacheco (Trinity College Dublin)
A Consolidated-By-Nationality Approach to Irish Foreign Exposure

Peter Zadrozny (Bureau of Labor Statistics)
Cost-of-Living Index of an Estimated Generalized CES Utility Function that Accounts for Changes in Preferences for and Qualities of Goods

Scott Kilbey (Office for National Statistics)
Data Sources-Representing their Quality and Influence on Statistics

Riikka Korhonen, **Holly Hickman** and **Rob Bucknall** (Office for National Statistics)
Deflator Development: Exploring Quality Adjustment and Unit Value Indices

Alexandr Kulakov (University College London)
How Well is Productivity of the UK Construction Industry is Measured on a Sectoral Basis

Kim Huyn (Bank of Canada), Danny Leung (Statistics Canada), **Robert Petrunia** (Lakehead University) and Marcel Voia (University of Orleans)
Investigating Heterogeneous Effects of the COVID-19 Pandemic on Canadian Firm Dynamics

Cristina Lafuente (European University Institute) and **Astrid Ruland** (European University Institute)
Measuring Labour Market Participation in Europe During COVID: The Role of Short-Time Work Schemes

Behzod Alimov (Westminster International University in Tashkent)
Private Debt, Public Debt and Capital Misallocation

Dinesh Kumar Nayak and Bhabesh Hazarik (National Institute of Public Finance and Policy)
Re-Examining the Validity of Wagner's Law for Indian Sub-National using Second-Generation Panel Co-Integration Techniques

Joel Kariel (University of Oxford) and Anthony Savagar (University of Kent)
Returns to Scale and Productivity

Matteo Mazzarano (Università Cattolica del Sacro Cuore)
The Waste Beta the Implications of Industrial Waste for Financial Markets

Bart Los and Xianjia Ye (University of Groningen)
Functional Specialization in Global Supply Chains and the Environmental Performance of Countries

Gary Koop, Stuart McIntyre, **Ping Wu** (University of Strathclyde), James Mitchell (Federal Reserve Bank of Cleveland) and Aubrey Poon (Örebro University)
Sub-Regional Nowcasting of Economic Growth in the UK

Matthew Whipple (Office for National Statistics)
VAT Flash? Even faster estimates of the UK economy

Diane Coyle and **Rehema Msulwa** (University of Cambridge)
Digital Concrete

Sharada Nia Davidson, **Kevin Connolly**, Ciara Crummey, Niccolò Brazzelli and Mairi Spowage
(University of Strathclyde)
*Building a Suite of Subnational Socioeconomic Indicators for the United Kingdom: Opportunities,
Challenges and Recommendations*

Friday 27 May 2022

08.30-09.00: Registration and Coffee
        Location: Level 2 Foyer

09.00-10.30: Special Sessions D/E/F and Contributed Sessions N/O

Special Session D: Measuring the Digital Economy
Location: Auditorium B

Chair: Diane Coyle (University of Cambridge)

-   **Cliodhna Taylor** (Office for National Statistics)
    A Framework for UK Digital Economy Statistics

-   **John Mitchell** (OECD)
    The Development of Digital Supply-Use Tables

-   **Diane Coyle** (University of Cambridge)
    Are Digital-using UK Firms More Productive?

**Special Session E: Are Traditional Periodic Seismic Shifts to New SIC and SOC Classification Systems
Old-Fashioned and can a Fully Dynamic Model of Classification be Viable as an Alternative?**
        Location: Auditorium C

        Chair: Iain Russell
        Panellists: Ed Humpherson (Office for Statistics Regulation), Suzanne Fry (Office for National
        Statistics), Alex Craven (Data City)

Special Session F: Diagnostics of the UK Productivity Puzzle
        Location: Level 3 Conference Room 4 & 5

Chair: Bart van Ark (The Productivity Institute and University of Manchester)

- **Peter Goodridge** (The Productivity Institute and University of Manchester) and Jonathan Haskel (Bank of England, Imperial College London, Centre for Economic Policy Research and Institute of Labor Economics)
  Productivity and Innovation in the UK Market Sector at Detailed Industry Level

- Patricia G. Rice (University of Oxford) and **Anthony Venables** (The Productivity Institute and University of Manchester)
  Tradability, Productivity, and Regional Disparities: Theory and UK Evidence

- **Myungun Kim** (University of Cambridge) and **Chander Velu (**The Productivity Institute and University of Cambridge)
  Vertical Integration and Firm Productivity

Contributed Session N: COVID-19 II
        Location: Level 3 Conference Room 2

Chair: Peter Levell (Institute for Fiscal Studies)

- Carlo Corradini, Jesse Matheson and **Enrico Vanino** (University of Sheffield)
  Urban density and viral infection: Disentangling the role of residential and employment neighbourhood structures

- **Moatazbellah Farid** (University of Kent)
  Land Tax Holiday and House Prices: Evidence from the UK

- **Peter Levell** (Institute for Fiscal Studies) and Lars Nesheim (University College London)
  The Impact Of 2020 Lockdowns on Consumer Welfare

Contributed Session O: Income and Wealth Inequality
        Location: Level 3 Conference Room 3

Chair: Alberto Vesperoni (King's College London)

- Pierre-Alain Pionnier and **Johannes Schuffels** (OECD)
  Estimating Regional House Price Levels

- Luisa Corrado (University of Rome) and Tor Vergata and **Aicha Kharazi** (Free University of Bozen-Bolzano)
  Collateral, Household Borrowing, and Income Distribution

- **Alberto Vesperoni** (King's College London), Irem Bozbay (University of Surrey) and Roberto Iacono (Norwegian University of Science and Tech)
  Measuring Wealth: Income Capitalization with Heterogeneous Rates of Return

10.30-11.00: Coffee
    Location: Level 2 Foyer

11.00-12.30: Plenary Session III and Closing Remarks
    Location: Auditoria B & C

Chair: Bart Los (University of Groningen)

    Michael Pollitt (Judge Business School, University of Cambridge)
    The Green Economy and the Path to Net Zero: Implications for Productivity Measurement

Closing Remarks

Mairi Spowage (University of Strathclyde)